AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claims 1-35 (Cancelled)

Claim 36 (New): A generally cylindrical stent for delivery to a coronary artery, said stent having a first pre-deployment diameter and a second deployed diameter, said stent being cut from a pre-existing metal tube and having a circumference and a longitudinal axis, said stent having sufficient flexibility to permit percutaneous delivery to a curved coronary artery; said stent in its first diameter comprising:

at least two longitudinally spaced apart circumferential rings, each of said circumferential rings defining a portion of the circumference of the stent, each of said circumferential rings having at least two peak segments and at least two valley segments; and

at least one connector having a first end portion and a second end portion, said first end portion being fixedly connected to a peak segment of a first of said circumferential rings and said second end portion being fixedly connected to a valley segment of a circumferential ring adjacent to said first circumferential ring, at least one of said first and second end portions of said connector including a straight segment that is substantially parallel to the longitudinal axis of the stent, said connector having at least one circumferentially extending generally U-shaped turn back portion between its first and second end portions that can expand or contract in length, as measured by the straight line distance between its first and second end portions, while being passed through a curved coronary artery.

Claim 37 (New): The stent of claim 36, wherein the turn back portion has a first end point and a second end point, and a line drawn from the first end point to the second end point is generally parallel to the longitudinal axis of the stent.

Claim 38 (New): The stent of claim 37, wherein said line drawn from the first end point to the second end point remains generally parallel to the longitudinal axis of the stent when the stent is expanded into its second deployed diameter.

Claim 39 (New): The stent of claim 36, wherein the stent is laser-cut from a pre-existing metal tube.

Claim 40 (New): The stent of claim 36, wherein at least three circumferentially spaced connectors connect said first circumferential ring and a circumferential ring adjacent to said first circumferential ring.

Claim 41 (New): The stent of claim 36, wherein said connector has at least two turn back portions between its first and second end portions.

Claim 42 (New): The stent of claim 36, wherein each of said first and second end portions of said connector includes a straight segment and a straight line drawn therethrough is substantially parallel to the longitudinal axis of the stent.

Claim 43 (New): The stent of claim 36, wherein at least one turn back portion of said connector is located entirely within a valley segment of a circumferential ring.

Claim 44 (New): The stent of claim 36, wherein said connector includes at least two generally U-shaped turn back portions that open in opposite directions.

Claim 45 (New): A generally cylindrical stent for delivery to a coronary artery, said stent having a first pre-deployment diameter and a second deployed diameter, said stent being cut from a preexisting metal tube and having a longitudinal axis, said stent having sufficient flexibility to permit percutaneous delivery to a curved coronary artery; said stent in its first diameter comprising:

a multiplicity of closed perimeter cells, each of said cells including at least one generally U-shaped turn back portion having a first end point and a second end point wherein a line drawn from the first end point to the second end point is generally parallel to the longitudinal axis of the stent.

Claim 46 (New): The stent of claim 45, wherein said line drawn from the first end point to the second end point remains generally parallel to the longitudinal axis of the stent when the stent is expanded into its second deployed diameter.

Claim 47 (New): The stent of claim 45, wherein each of said cells has at least one circumferentially adjacent cell which shares one generally U-shaped turn back portion.

Claim 48 (New): The stent of claim 45, wherein the stent includes at least two longitudinally spaced apart circumferential rings, each of said circumferential rings having at least two peak segments and at least two valley segments; and at least one connector having a first end portion and a second end portion, said first end portion being fixedly connected to a peak segment of a first of said circumferential rings and said second end portion being fixedly connected to a valley segment of a circumferential ring adjacent to said first circumferential ring, said connector having at least one of said generally U-shaped turn back portions, wherein each of said closed perimeter cells includes at least a portion of two circumferentially adjacent rings and at least one connector.

Claim 49 (New): The stent of claim 45, wherein the stent is laser-cut from a pre-existing metal tube.

Claim 50 (New): The stent of claim 45, wherein each of said cells includes at least two generally U-shaped turn back portions.

Claim 51 (New): A generally cylindrical stent for delivery to a coronary artery, said stent having a first pre-deployment diameter and a second deployed diameter, said stent being cut from a pre-existing metal tube and having a longitudinal axis, said stent having sufficient flexibility to permit percutaneous delivery to a curved coronary artery; said stent in its first diameter comprising:

at least two longitudinally spaced apart circumferential rings and at least one connector, said connector having a first end portion fixedly connected to a first of said circumferential rings and a second end portion fixedly connected to a circumferential ring adjacent to said first circumferential ring, said connector including at least one generally U-shaped turn back portion having a first end point and a second end point so that a line drawn from the first end point to the second end point is generally parallel to the longitudinal axis of the stent so as to define a multiplicity of perimeter cells that

include at least a portion of two circumferentially adjacent rings and at least one connector.

Claim 52 (New): The stent of claim 51, wherein said line drawn from the first end point to the second end point remains generally parallel to the longitudinal axis of the stent when the stent is expanded into its second deployed diameter.

Claim 53 (New): The stent of claim 51, wherein the stent is laser-cut from a pre-existing metal tube.

Claim 54 (New): The stent of claim 51, wherein at least three circumferentially spaced connectors connect said first circumferential ring and a circumferential ring adjacent to said first circumferential ring.

Claim 55 (New): The stent of claim 51, wherein said connector has at least two turn back portions between its first and second end portions.

Claim 56 (New): The stent of claim 51, wherein said connector includes at least two generally U-shaped turn back portions that open in opposite directions.